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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,389	05/25/2001	Jacob Richter	2390/49704	1194

7590 05/12/2009

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EXAMINER	
BUI, VY Q	

ART UNIT	PAPER NUMBER
3773	

MAIL DATE	DELIVERY MODE
05/12/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/864,389	RICHTER ET AL.	
	Examiner	Art Unit	
	Vy Q. Bui	3773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,6,8,11,26,28,42-47 and 49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,6,8,11,26,28,42-47 and 49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
> The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1, 6, 42-47 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brown et al-7,204,848.

As to claims 1, 6, 42-47, Brown-'848 (portion of Fig. 2, see below) discloses substantially the claimed invention including following single, continuous, generally sinusoidal loop containing sections or bands: 3rd loop containing sections (3rd LCS)/2nd bands of second frequency F2 **directly joined** 1st loop containing sections (1st LCS)/1st bands of 1st frequency F1 and 2nd loop containing sections (2nd LCS)/1st bands of 1st frequency F1 (F1< F2) as recited in the claims.

Further, Brown-'848's Fig. 2 clearly shows 1st and 2nd loop containing sections/1st bands including members 144 circumferentially wider than members 120 of 3rd loop containing section/ 2nd bands as recited in the claims. All generally sinusoidal loop containing sections or bands are single because they have single members, such as members 120 or 144.

Alternatively, it would have been obvious to one of ordinary skill in the art to provide wider members 144 of 1st and 2nd loop containing sections in comparison to narrower members 120 of 3rd loop containing section to provide more strength for at locations of 1st and 2nd loop containing sections as one desires. Further, It would have been an obvious matter of design choice to modify the size of members 144 to be wider than members 120, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

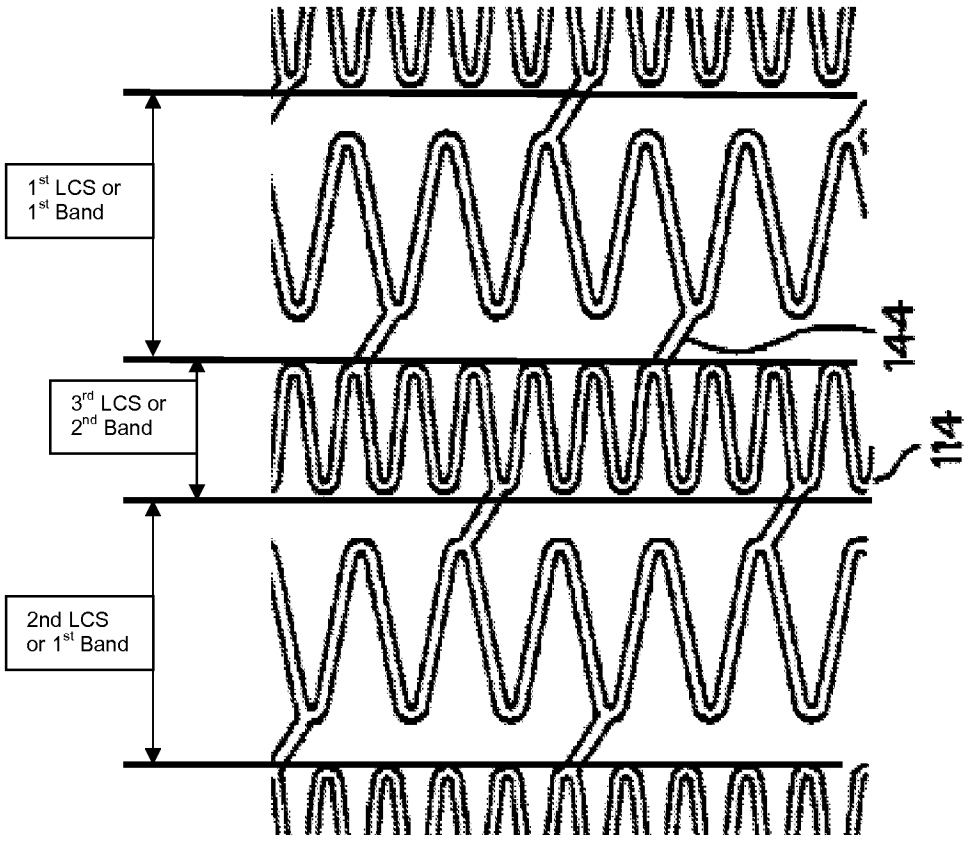


FIG. 2

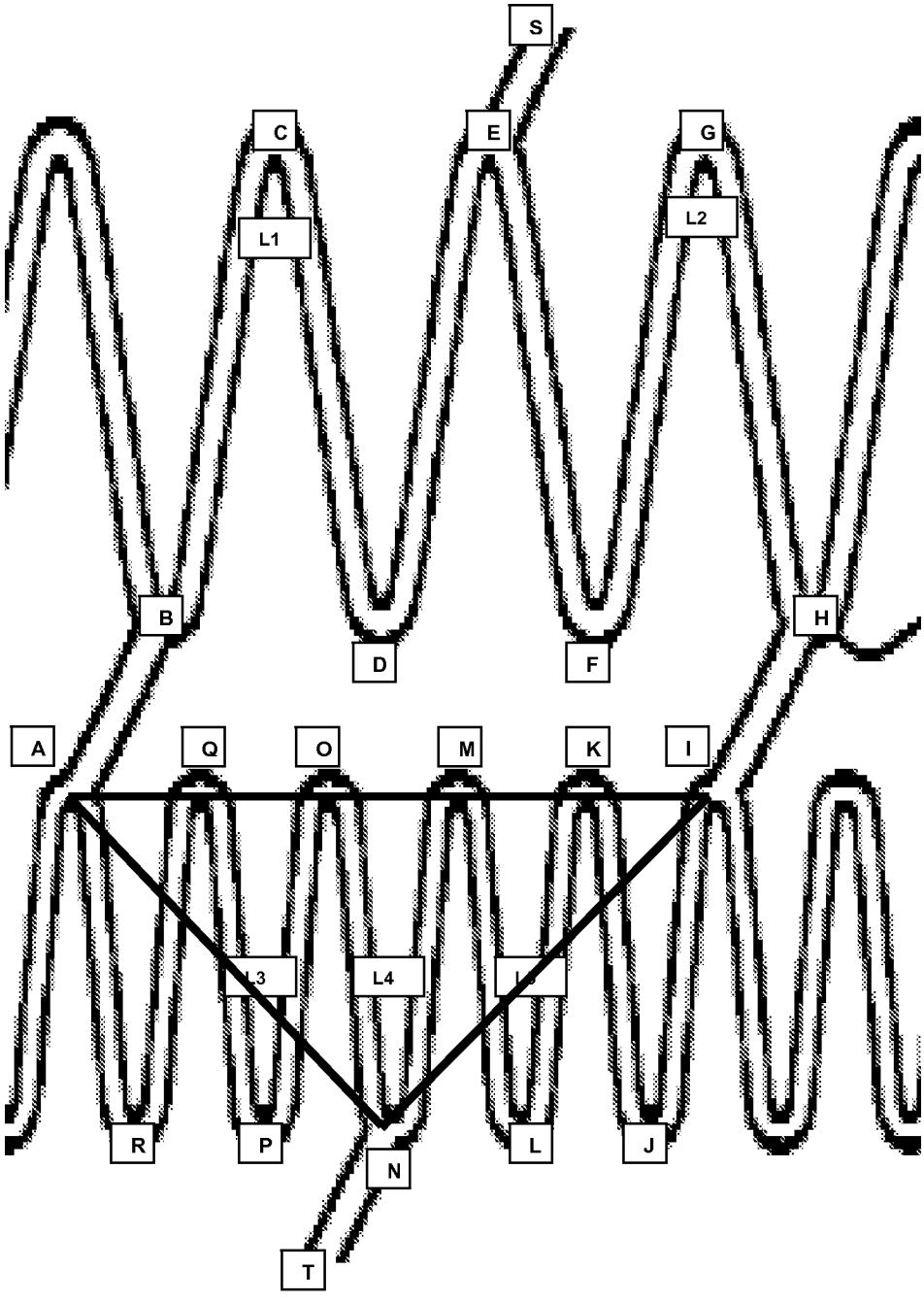
2. Claims 11 and 26 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brown et al-7,204,848.

As to claim 11, Brown-'848 (portion of Fig. 2, see below) discloses substantially the claimed invention including triangular cells including following single, continuous, generally sinusoidal loop containing sections: 3rd loop containing sections ABCDEFGHI of second frequency F2 joining 1st loop containing sections ARQPON of 1st frequency F1> F2 and 2nd loop containing sections NMLKJI of frequency F1>F2, 1st loop containing sections. Brown-'848's Fig. 2 shows members 144 of 3rd loop containing section including wider members 144 than members 120 of 1st and 2nd loop containing sections as recited in the claims. All generally sinusoidal loop containing sections or bands are single because they have single members, such as members 120 or 144.

Alternatively, it would have been obvious to one of ordinary skill in the art to provide wider members 144 of 3rd loop containing sections in comparison to narrower members 120 of 1st and 2nd loop containing sections to provide more strength for at locations of 1st and 2nd loop containing sections as one desires. Further, It would have been an obvious matter of design choice to modify the size of members 144 to be wider than members 120, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

As to claim 26, Brown-'848's Fig. 2 and Fig. 3 show a stent of stainless steel or Nitinol (C. 12, ll. 25-37 and enlarged one cell below) including triangular cells having wider and stronger members of lower frequency F1 (1st member ABC, 2nd member CDE, 3rd member EFG, 4th member GHI) than members of higher frequency F2 (5th member ARQP, 6th member PO, 7th member ON, 8th member NM, 9th member ML and 10th member LKJI) and 1st to 10th members formed 1st loop L1, 2nd loop L2, 3rd loop L3, 4thloop L4 and 5th loop L5 substantially as recited in the claims.

Alternatively, it would have been obvious to one of ordinary skill in the art to provide wider 1st, 2nd, 3rd, 4th members of lower frequency in comparison to narrower members 120 of 6th, 7th, 8th, 9th and 10th members to provide more radial strength at locations of 1st, 2nd, 3rd, 4th members of lower frequency and narrower members 120 of 6th, 7th, 8th, 9th and 10th members to provide more flexibility for the stent to adapt to curvatures of a curved blood vessel. Further, It would have been an obvious matter of design choice to modify the size of members 144 to be wider than members 120, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al-6,776,793 B2 in view of Burpee et al.-6,179,868 B1.

As to claim 49, Brown-'793 (Fig. 2) discloses stent 110 substantially as recited in the claims including:

(1). 1st and 2nd loop containing sections of lower frequency,

(2). 3rd loop containing sections of higher frequency,

(3). loop containing sections of higher frequency and loop containing sections of lower frequency disposed one between the other; except for the loop containing sections of lower frequency having struts that are circumferentially wider than struts of loop containing sections/bands of higher frequency and 1st and 2nd loop containing sections of lower frequency are 180 degrees out of phase.

However, Burpee-'868 (Fig. 3) discloses stent 40 including loop containing sections 20 of lower frequency having wider struts and out of phase 180 degree one to each other to enhance radial strength, and loop containing sections 30 of higher frequency having narrower struts to enhance the flexibility of the stent 40 when deployed in a tortuous vessel.

In view of Burpee-793, it would have been obvious to one of ordinary skill in the art to modify Brown-'793's stent 110 to have loop containing sections 132 of lower frequency having

wider struts and out of phase 180 degree one to each other to enhance radial strength; and loop containing sections 120 of higher frequency having narrower struts in comparison to the struts of the loop containing sections of lower frequency to enhance the flexibility of the stent 110 when deployed in a tortuous vessel.

2. Claims 3, 8 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al-6,776,793 B2 in view Yang et al.-6,120,847.

As to claims 3, 8 and 28, Brown et al-6,776,793 B2 discloses substantially all limitations recited in the claims, except for the stent is coated with a medicine for treatment purpose.

However, coating a stent with a medicine or drug is well known in the art. For example, YANG discloses a method for coating a therapeutic substance on the surface of the stent for local treatment of a blood vessel. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a medicine coating to a stent of Brown et al-6,776,793 to the distribute medicine directly to the treatment site of a blood vessel.

Response to Arguments

Applicant's arguments with respect to all rejected claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vy Q. Bui whose telephone number is 571-272-4692. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on 571-272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vy Q. Bui/
Primary Examiner, Art Unit 3773